Woolich Racing

Race Tools Installation Instructions

Suzuki Race Tools Type 1

1)Introduction

To connect your Woolich Racing - Race Tools to your bike you need to install the strain gauge quickshifter and shift rod and also the Race Tools harness. This is a relatively simple procedure that involves:

1) Removing the stock shift rod
2) Installing the Woolich Racing Strain Gauge Quickshifter and Shift Rod
3) Installing the Race Tools harness
4) Installing the Pit Speed Limiter harness (optional).
5) Quickshifter Hardware Configuration
6) Race Tools Software Configuration

The above procedure is described in detail in this guide and should take approximately 10-15 minutes to complete. No cutting or splicing of the wiring harness is required for this install.

Note: The Race Tools harness uses the Exhaust Valve plug on the stock bike harness. You should remove the Exhaust Valve servo motor and Exhaust Valve and disable it in your bin file.

2) Hardware

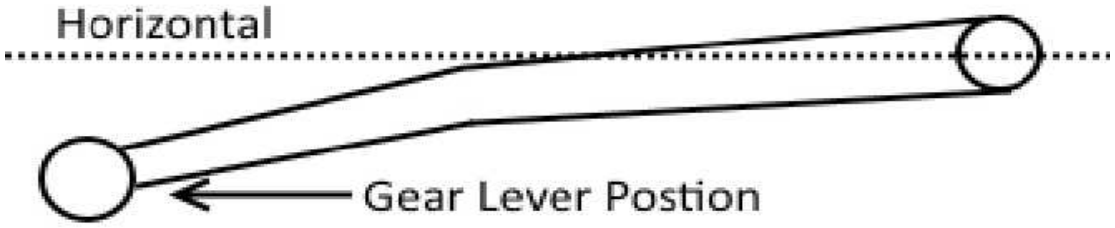
To install the Race Tools you should have the following hardware as supplied with your Woolich Racing product:

1. Woolich Racing Strain Gauge Quickshifter and associated hardware
2. Shift Rod appropriate to your bike
3. Woolich Racing Race Tools harness
4. Pit Speed Limiter Harness (optional)

3) Quickshifter Installation

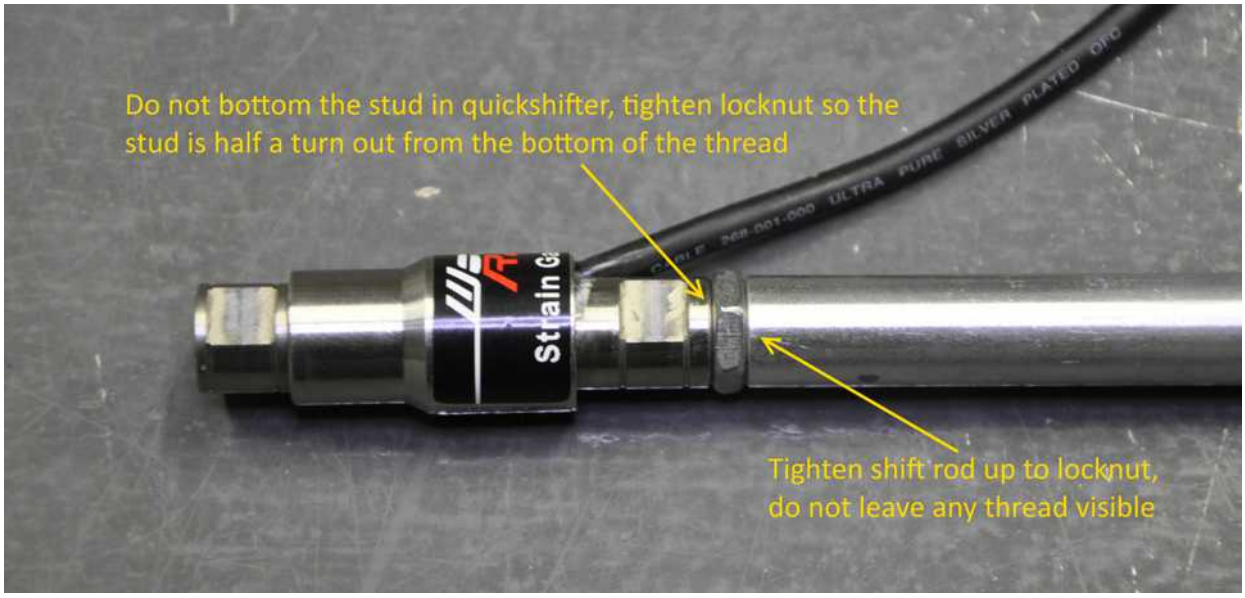
The following steps describe the installation of the Woolich Racing strain gauge quickshifter:

- Take note of the current position of the gear shift lever, this will allow you to adjust the new shift rod so the gear shift lever is in the same position after quickshifter installation.



- Remove the stock shift rod.

- Pre-assemble the Woolich Racing quickshifter and shift rod using the appropriate studs and lock nuts from the Race Tools kit. **Do Not bottom out the studs into the quickshifter.** Tighten the locknut so the stud is half a turn out from the bottom of the quickshifter thread. Tighten the shift rod up the the locknut.


Do not bottom the stud in quickshifter, tighten locknut so the stud is half a turn out from the bottom of the thread
Tighten shift rod up to locknut, do not leave any thread visible

- Once pre-assembled the length should match (+/- 10mm) the length of the stock shift rod.

Note: The quickshifter rod shown above is a generic example,

your particular model may be a different length and style of rod.

- Install the assembled Woolich Racing quickshifter rod onto the bike
- Adjust the rod so the gear position lever is in the same position as noted above.

Race Tools Harness Installation
The following describes the installation of the Woolich Racing Race Tools harness:

- Locate the 6 pin SDS plug under the seat
- Identify the matching SDS plug on the Woolich Racing - Race Tools Harness.

- Plug the Woolich Racing SDS plug into the bike's SDS plug.

- If you are using a Woolich Racing on-bike harness you can plug this into the matching plug on the Woolich Racing harness.

- Route the 3 pin quickshifter plug and harness up under the seat, ensure the harness is away from any moving parts, ensure there is some free play in the harness near the shift lever to allow normal operation of the shift rod.
- Use zip ties (or similar) to secure the quickshifter harness in place on the bike.

- Locate the 3 pin plug on the Woolich Racing – Race Tools harness

- Plug the 3 pin plug on the quickshifter harness into the 3 pin plug on the Race Tools harness.

- Locate the 3 pin Exhaust Valve plug on the bike
- Locate the matching 3 pin Exhaust Valve plug on the Woolich Racing – Race Tools harness.

- Plug the matching Exhaust Valve plugs together

Pit Speed Limiter Harness (Optional)

- Locate the 2 pin Pit Speed Limiter plug on the Woolich Racing – Race Tools harness.

- Plug the 2 pin plug on the Pit Speed Limiter harness into the matching plug on the Race Tools harness.

- Route the Pit Speed Limiter harness under the body work and to the handle bars.
- Use zip-ties (or similar) to secure the Pit Speed Limiter button in the handle bar region for easy access.

Final Installation

Ensure that the Race Tools harness and Quickshifter harnesses are clear of any moving parts and adequately secured to the bike with zip ties (or similar).

Re-assemble any components or parts you may have taken off the bike during the installation.

Quickshifter Hardware Configuration

Once you have installed the Quickshifter and Race Tools harness you need to configure the Quickshifter Hardware.

- Hold down both buttons on the quickshifter module
- While still holding down both buttons, turn the ignition on.
- The LED's will flash “UP”

- Apply Pressure to the Gear Shift lever in the up gear change direction e.g. if the bike is in 2nd gear, apply pressure in the direction of 3rd gear, hold the pressure for approximately 5 seconds.
- The quickshifter should now be configured for the correct “UP” direction. You can test the activation by applying pressure to the gear shift lever, a small dot on the quickshifter LED display will light up when the pressure applied initiates a shift.

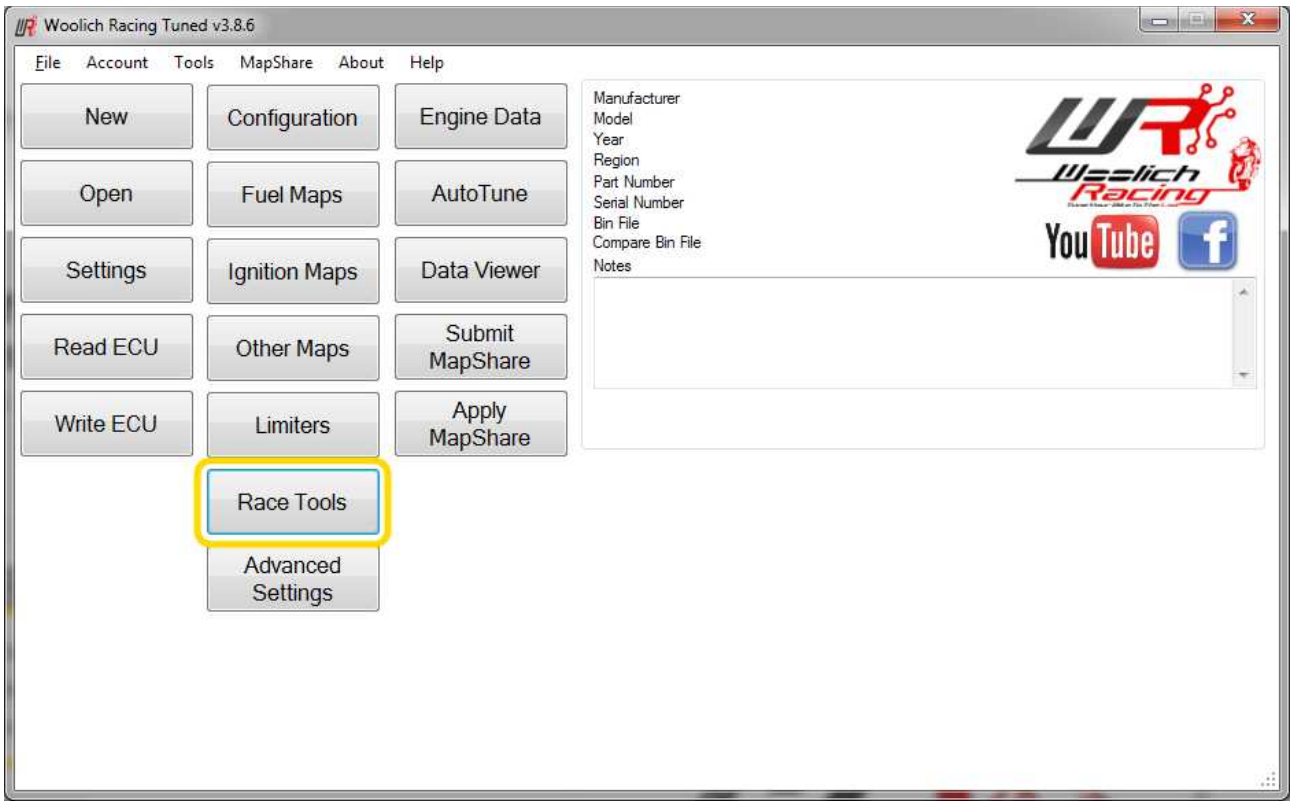
Shift Pressure Adjustment

The amount of pressure on the gear shift lever required to initiate a shift can be changed to suit rider preference.

- Turn the Ignition on
- Hold down the right button on the quickshifter module until the current shift pressure setting is displayed.
- Continue to hold down the right button while also pressing the left button for approximately 5 seconds until the shift pressure setting begins to flash.
- Use the buttons to adjust the shift pressure up or down.
- To store the setting, hold down both buttons until the display stops flashing.

Race Tools Software Configuration

The Race Tools software is configured by clicking the “Race Tools” button on the Main screen in the Woolich Racing Tuned (WRT) software.


Woolich Racing Tuned v3.8.6
File
Account
Tools
MapShare
About
Help
New
Configuration
Engine Data
Open
Fuel Maps
AutoTune
Settings
Ignition Maps
Data Viewer
Read ECU
Other Maps
Submit MapShare
Write ECU
Limiters
Apply MapShare
Race Tools
Advanced Settings
Manufacturer
Model
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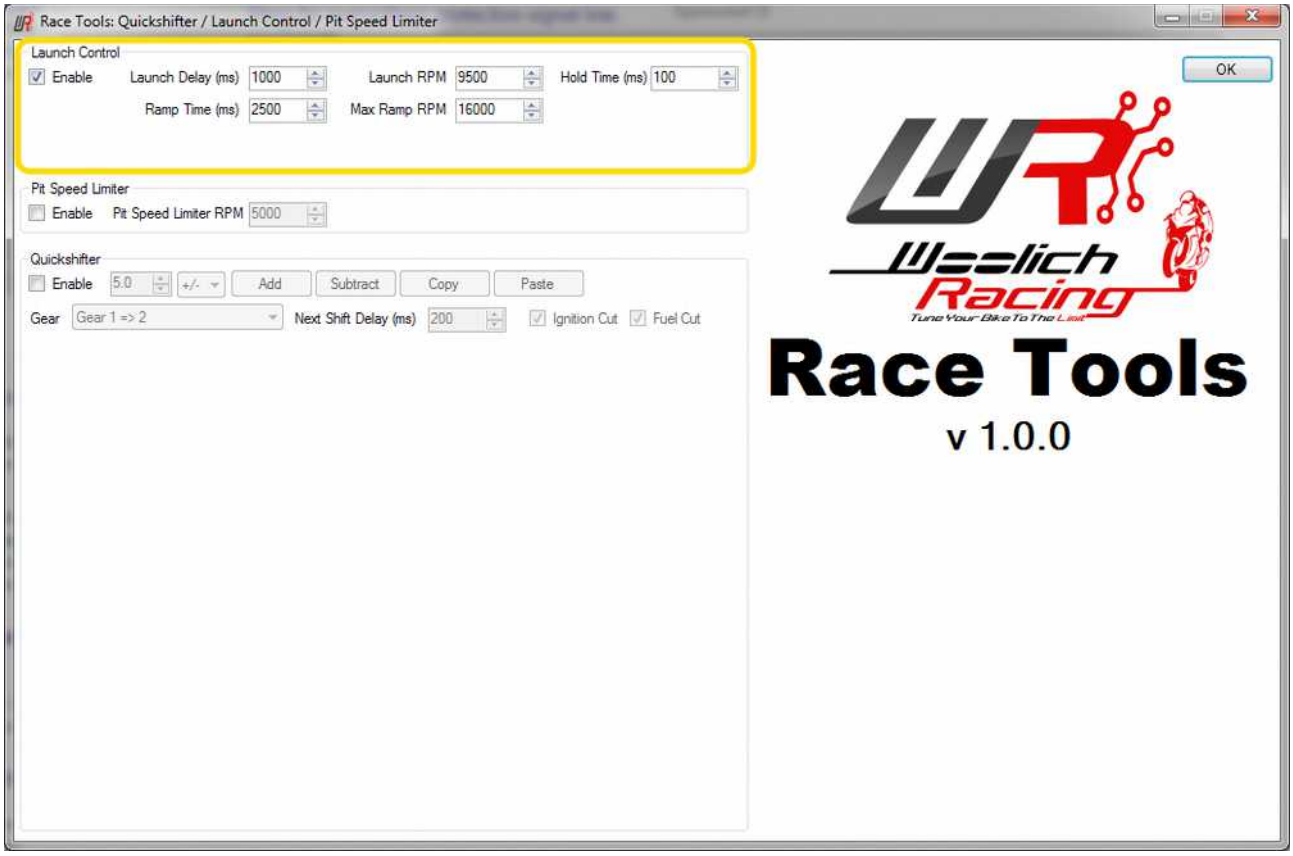
Region
Part Number
Serial Number
Bin File
Compare Bin File
Notes
Woolich Racing
YouTube

Launch Control:



Enable: Checkbox to enable Launch Control

Launch Delay: This setting is the amount of time that is required before the RPM Limiter is lowered to the Launch RPM after the clutch is pulled in.

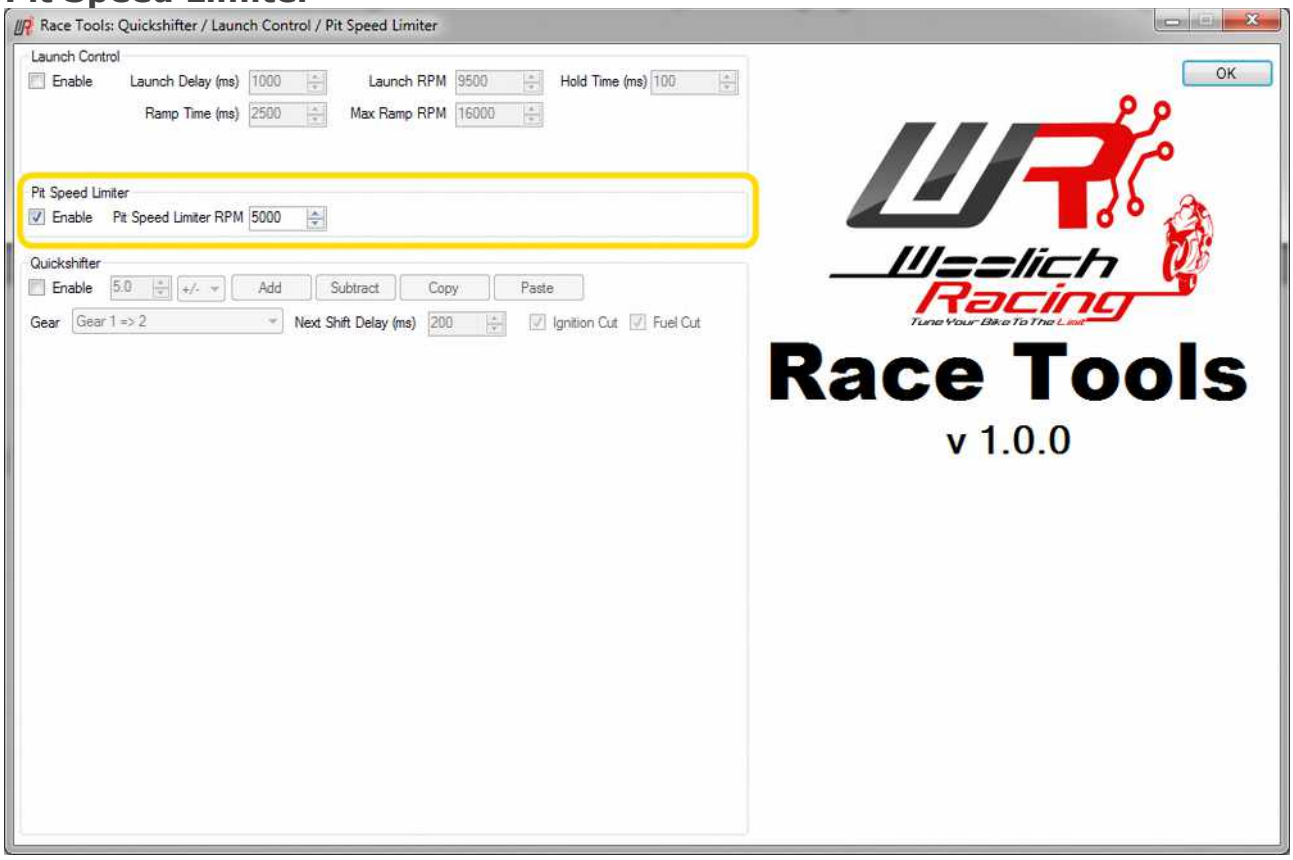
Launch RPM: This is the lower RPM for Launch that is initiated when the clutch is pulled in.

Ramp Time: This setting controls how long the launch control will control the RPM once the clutch is out. The RPM is ramped from the Launch RPM to the Max RPM, the ramp time controls how long it takes to get there.

Max Ramp RPM: This is the maximum RPM that the launch control will ramp the RPM to.

Hold Time: The hold time allows you to add a short delay between when the clutch is released and the Launch Control RPM Ramp begins, during the Hold Time the engine RPM is held at the Launch RPM.

Pit Speed Limiter

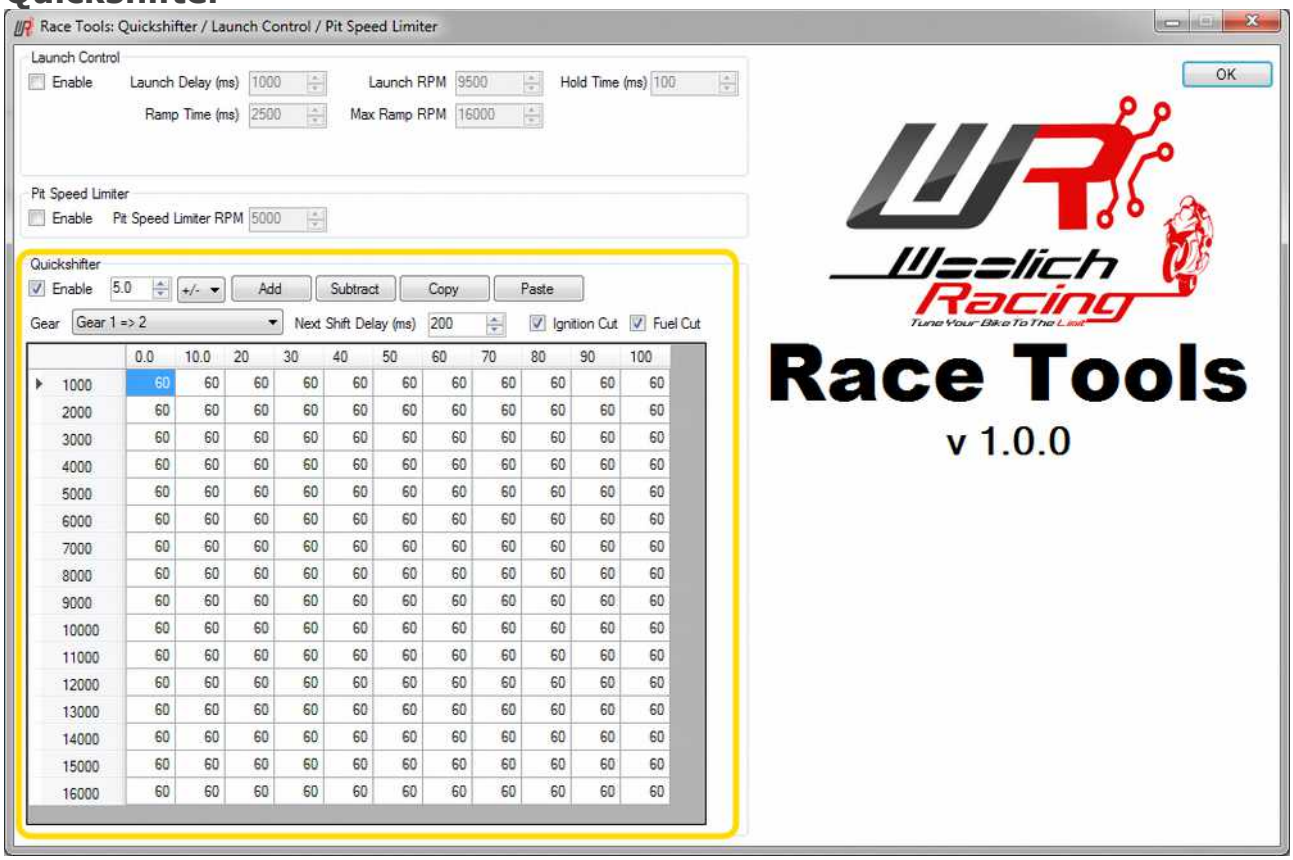


Enable: Checkbox to enable the Pit Speed Limiter

Pit Speed Limiter RPM: Set the value for engine RPM that corresponds to the RPM in 1st gear for the Speed Limit in Pit Lane.

Note: Pit speed limiter is only active in 1st gear.

Quickshifter



Enable: Checkbox to enable the quickshifter

Gear: Select the Gear Map you would like to edit.

Next Shift Delay: The amount of time before another shift can be initiated.

Ignition Cut: Cuts Ignition when the quickshifter is initiated

Fuel Cut: Cuts Fuel when the quickshifter is initiated.

Map Editing: Use the Add, Subtract, Copy and Paste controls to edit the values in the quickshifter kill time maps, The values are displayed in ms.

Warranty

Woolich Racing Warranty obligations are limited to the terms set forth below.
Woolich Racing warrants this product against defects in material and workmanship for the period of one (1) year. The warranty period begins with the date of original retail purchase. This limited warranty is made only to the original end user purchaser ("you") of the product and does not extend to any subsequent purchasers or owners of the product. The "original end user" is the first user to put the product into service in any fashion. It is your responsibility to establish the warranty period by verifying the original purchase date.
If you discover a defect, Woolich Racing will, at its option, repair or replace this product with a new or reconditioned product at no charge to you, provided you return it during the warranty period, with transportation charges prepaid, to Woolich Racing. Please attach your name, address, telephone number, and a copy of the receipt from Paypal as proof of date of original purchase, as well as a detailed description of the problem for which service is requested. You are responsible for packing the product to be returned. If the repairs are covered by the Limited Warranty and if the product was properly shipped to Woolich Racing, Woolich Racing will pay the return shipping charges. This warranty applies only to Woolich Racing products. This warranty does not cover damaged resulting from accident, misuse, abuse, or neglect and/or damage during any type of transportation resulting from improper packaging; damage to any product which has been altered in any fashion, including damage resulting from causes other than product defects, including and not by way of limitation, lack of technical skill, competence, or experience of the user, and/or failure to use the product in accordance with the instructions provided in the User's Manual or Installation Manual; and service performance by an unauthorized person or entity. Any implied warranties including fitness for use and merchantability are limited to the period of the expressed warranty set forth above. The remedies provided under this warranty are exclusive and in lieu of all others.

Disclaimer

This product is meant for Off-Road use only and is not street legal. Owner assumes responsibility for his or her own actions when using this product. Woolich Racing hereby expressly disclaims liability and shall not be responsible for incidental, consequential and contingent damages or any kind or nature, including, without limitation: damages to persons or property, whether a claim for such damages is based upon warranty, contract, tort or otherwise; damages due to or arising out of the loss of time; or loss of profits. Woolich Racing shall not be responsible for any damages caused by the presence of error or omission in any of its manuals, instructions or related materials.